

GILA RIVER BASIN

09480000 SANTA CRUZ RIVER NEAR LOCHIEL, AZ

LOCATION--Lat 31°21'19", long 110°35'20", in SW_{1/4} sec. 11, T.24 S., R.17 E. (unsurveyed), Santa Cruz County, Hydrologic Unit 15050301, on southern border of Spanish land grant of San Rafael, near left bank on downstream side of pier of bridge on county road, 1.7 mi upstream from international boundary, and 2.5 mi northeast of Lochiel.

DRAINAGE AREA--82.2 mi².

PERIOD OF RECORD--Jan. 1949 to current year.

REVISED RECORDS--WSP 1733: 1951. WDR AZ-94-1: 1993.

GAGE--Water-stage recorder. Elevation of gage is 4,620 ft above sea level, from topographic map.

REMARKS--Records fair. Small diversions for irrigation of 200 acres above station, mostly by pumping from ground water.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 12,000 ft³/s Oct. 9, 1977 and Aug. 15, 1984, gage height, 10.21 ft and 10.2 ft, respectively, from rating curve extended above 1,600 ft³/s on basis of slope-area measurement at gage height 10.21 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 500 ft³/s and (or) maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Aug. 14	0115	*22	*7.50

Minimum daily discharge, no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.20	0.30	0.33	0.34	0.39	0.33	0.26	0.12	0.00	0.07	0.03
2	0.10	0.20	0.31	0.33	0.34	0.39	0.32	0.26	0.11	0.00	0.07	0.02
3	0.09	0.21	0.31	0.33	0.34	0.39	0.32	0.26	0.09	0.00	0.06	0.02
4	0.10	0.22	0.30	0.33	0.34	0.39	0.31	0.26	0.08	0.00	0.05	0.02
5	0.10	0.22	0.30	0.33	0.35	0.39	0.29	0.26	0.07	0.00	0.05	0.02
6	0.10	0.22	0.30	0.33	0.34	0.39	0.28	0.26	0.07	0.00	0.04	0.02
7	0.11	0.23	0.31	0.33	0.35	0.39	0.26	0.26	0.07	0.00	0.04	0.02
8	0.12	0.23	0.31	0.34	0.36	0.39	0.25	0.25	0.07	0.00	0.03	0.02
9	0.12	0.24	0.31	0.33	0.36	0.39	0.23	0.25	0.08	0.00	0.03	0.03
10	0.12	0.25	0.31	0.33	0.36	0.39	0.22	0.25	0.08	0.00	0.03	0.03
11	0.12	0.25	0.31	0.33	0.37	0.38	0.22	0.25	0.08	0.00	0.03	0.03
12	0.12	0.25	0.31	0.33	0.37	0.38	0.23	0.25	0.07	0.00	0.03	0.02
13	0.13	0.25	0.31	0.33	0.38	0.38	0.24	0.24	0.07	0.00	0.00	0.02
14	0.13	0.25	0.31	0.33	0.38	0.38	0.25	0.23	0.05	0.00	1.3	0.02
15	0.13	0.25	0.31	0.33	0.37	0.38	0.26	0.22	0.03	0.00	0.06	0.02
16	0.14	0.26	0.32	0.33	0.37	0.38	0.25	0.20	0.03	0.00	0.05	0.02
17	0.16	0.26	0.32	0.33	0.37	0.39	0.23	0.19	0.01	0.00	0.03	0.02
18	0.16	0.26	0.32	0.33	0.37	0.40	0.24	0.20	0.01	0.00	0.03	0.02
19	0.17	0.26	0.32	0.34	0.37	0.38	0.25	0.20	0.00	0.01	0.04	0.03
20	0.17	0.26	0.32	0.34	0.38	0.38	0.26	0.19	0.00	0.01	0.04	0.02
21	0.17	0.27	0.32	0.34	0.40	0.37	0.26	0.16	0.00	0.03	0.04	0.02
22	0.17	0.26	0.32	0.34	0.38	0.37	0.27	0.13	0.00	0.02	0.05	0.02
23	0.17	0.26	0.33	0.34	0.38	0.36	0.27	0.13	0.00	0.03	0.05	0.04
24	0.15	0.27	0.32	0.34	0.38	0.36	0.27	0.13	0.00	0.03	0.04	0.06
25	0.14	0.27	0.32	0.34	0.38	0.35	0.27	0.13	0.00	0.02	0.05	0.06
26	0.16	0.27	0.32	0.34	0.42	0.35	0.27	0.15	0.00	0.03	0.05	0.05
27	0.17	0.28	0.32	0.34	0.38	0.37	0.28	0.15	0.00	0.04	0.06	0.05
28	0.18	0.28	0.33	0.34	0.39	0.34	0.27	0.14	0.00	0.04	0.05	0.05
29	0.19	0.29	0.33	0.35	---	0.33	0.27	0.14	0.00	0.07	0.05	0.05
30	0.19	0.30	0.33	0.35	---	0.33	0.26	0.16	0.00	0.06	0.04	0.05
31	0.20	---	0.33	0.35	---	0.33	---	0.15	---	0.06	0.04	---
TOTAL	4.38	7.52	9.78	10.40	10.33	11.56	7.93	6.31	1.19	0.45	2.60	0.90
MEAN	0.14	0.25	0.32	0.34	0.37	0.37	0.26	0.20	0.040	0.015	0.084	0.030
MAX	0.20	0.30	0.33	0.35	0.42	0.40	0.33	0.26	0.12	0.07	1.3	0.06
MIN	0.09	0.20	0.30	0.33	0.34	0.33	0.22	0.13	0.00	0.00	0.00	0.02
MED	0.14	0.25	0.32	0.33	0.37	0.38	0.26	0.20	0.03	0.00	0.04	0.02
AC-FT	8.7	15	19	21	20	23	16	13	2.4	0.9	5.2	1.8
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	4.65	1.27	1.84	4.08	1.77	1.78	0.88	0.44	0.33	7.66	14.5	4.63
MAX	77.0	16.2	17.8	94.7	18.0	34.2	8.68	2.77	2.83	69.4	187	44.3
(WY)	1978	2001	1979	1993	1985	1983	1993	1983	1973	1950	1984	1964
MIN	0.000	0.000	0.000	0.023	0.032	0.013	0.000	0.000	0.000	0.015	0.000	0.000
(WY)	1954	1954	1954	1963	1963	1963	1963	1954	1949	2003	1962	1953

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1949 - 2003
ANNUAL TOTAL	109.81	73.35	
ANNUAL MEAN	0.30	0.20	3.71
HIGHEST ANNUAL MEAN			29.0
LOWEST ANNUAL MEAN			0.20
HIGHEST DAILY MEAN	1.2	Mar 3	1770 Jan 18 1993
LOWEST DAILY MEAN	0.00	Jun 24	0.00 May 19 1949
ANNUAL SEVEN-DAY MINIMUM	0.02	Jun 22	0.00 May 19 1949
ANNUAL RUNOFF (AC-FT)	218	145	2690
ANNUAL RUNOFF (CFSM)	0.004	0.002	0.045
10 PERCENT EXCEEDS	0.60	0.37	4.1
50 PERCENT EXCEEDS	0.25	0.23	0.50
90 PERCENT EXCEEDS	0.09	0.02	0.00